



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/733,445

12/12/2003

Masahiro Hata

032170

1433

38834

7590

09/17/2004

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP
1250 CONNECTICUT AVENUE, NW
SUITE 700
WASHINGTON, DC 20036

EXAMINER

DUDEK, JAMES A

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/733,445

Applicant(s)

HATA ET AL.

Examiner

James A. Dudek

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 2871

DETAILED ACTION***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1 069 461 A2 ("461").

Per claim 1, 461 teaches a laminated optical film comprising: an optical film (1) whose three dimensional refractive index is controlled so that an Nz coefficient represented with $Nz = (n_x - n_z) / (n_x - n_y)$ satisfies a relationship of Nz less than or equal to 0.9, when a direction where a refractive index in a film plane gives maximum is defined as X-axis, a direction perpendicular to X-axis as Y-axis, a thickness direction of the film as Z-axis, and refractive indexes in each axial direction are defined as $n_{x.sub.1}$, $n_{y.sub.1}$, and $n_{z.sub.1}$, respectively, and an optical film (2) that is formed with a material showing optically negative uniaxial property, and being tilting aligned [see paragraphs 19-89].

Per claim 2, 461 teaches the laminated optical film according to claim 1, wherein the Nz coefficient of the optical film (1) having the controlled three dimensional refractive index satisfies a relationship of Nz less than or equal to 0.3 [see paragraph 43].

Per claim 3, 461 teaches the laminated optical film according to claim 1, wherein the material showing optically negative uniaxial property forming the optical film (2) is a discotic liquid crystal compound [see paragraph 30-33].

Per claim 4, 461 teaches the laminated optical film according to claim 1, wherein the material showing optically negative uniaxial property forming the optical film (2) is tilting aligned so that an average optical axis, and a direction of normal line of the optical film (2) give a tilting angle in a range of 5 degrees to 50 degrees [see figure 3 there is a gradual increase in the tilt].

Art Unit: 2871

Per claim 5-6, 461 teaches a laminated optical film comprising: the laminated optical film according to claim 1, and an optical film (3) that satisfies n_x is greater than n_y , and n_y is approximately equal to n_z and demonstrates optically positive uniaxial property, when a direction where a refractive index in a film plane gives maximum is defined as X-axis, a direction perpendicular to X-axis as Y-axis, a thickness direction of the film as Z-axis, and refractive indexes in each axial direction are defined as n_x , n_y , and n_z , respectively [see paragraph 35].


Per claims 7-10, 461 teaches an elliptically polarizing plate comprising: the laminated optical film according to claim 1 and a polarizing plate [see plates 11-12].

Regarding the overlapping ranges, it would have been obvious to one of ordinary skill at the time of invention to use the range cited to improve viewing angles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Dudek whose telephone number is 571-272-2290. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


James A. Dudek
Primary Examiner
Art Unit 2871